

WHAT IS CLAIMED IS:

1 1. A method of performing and delivering analysis of a sports activity, comprising:
2 providing input via a communication device of a user;
3 interpreting the input provided by the user;
4 creating a transactional record of the sports activity based on the input provided
5 by the user;
6 analyzing the transactional record of the sports activity to generate analysis
7 information of the sports activity;
8 receiving a request for the analysis information of the sports activity; and
9 providing the analysis information of the sports activity to a requester.

1 2. The method of claim 1, further including storing the analysis information of the
2 sports activity in an analysis information database.

1 3. The method of claim 1, wherein the requester is the user.

1 4. The method of claim 1, wherein the analysis information is provided to the user
2 via voice, graphics, animation, or textual form.

1 5. The method of claim 1, wherein interpreting the input provided by the user
2 includes at least one of interpreting voice input, and interpreting communication device input
3 entries.

1 6. The method of claim 5, wherein interpreting voice input utilizes at least one of: a
2 speaker-independent speech recognition engine, a speaker-dependent speech recognition engine,
3 and a speaker pre-recorded custom utterances recognition engine.

1 7. The method of claim 1, wherein creating the transactional record of the sports
2 activity includes parsing the input provided by the user and performing error correction on the
3 input provided by the user based on at least one of a predefined vocabulary and grammar for user
4 communication, and a free-form natural language interpretation grammar.

1 8. The method of claim 7, wherein the free-form natural language interpretation
2 grammar is statistical language model (SLM) grammar.

1 9. The method of claim 1, further including at least one of: performing statistical
2 analysis of the sports activity, performing pattern detection on the transactional record of the
3 sports activity, creating strategy recommendations for participants in the sports activity, creating
4 improvement recommendations for the participants in the sports activity, and providing
5 comparisons of the statistical analysis of the sports activity with a group of players' averages or
6 team averages for the sports activity.

1 10. The method of claim 1, wherein analyzing the transactional record of the sports
2 activity to generate the analysis information of the sports activity includes at least one of:
3 scoring characterization, player performance characterization, team performance

4 characterization, temporal-based performance characterization, location-based performance
5 characterization, and objects of the game-based performance characterization.

1 11. The method of claim 9, wherein performing pattern detection on the transactional
2 record of the sports activity includes:

3 describing a pattern by defining a triggering event in terms of at least one of game
4 transaction records and game analysis records; and

5 defining a statistical significance level for triggering the pattern.

1 12. The method of claim 1, wherein providing the analysis information of the sports
2 activity to the requester includes at least one of: instantaneously delivering the analysis
3 information at a time of request, delivering the analysis information at predetermined intervals of
4 time from the time of request, delivering the analysis information at a predetermined point in a
5 game, delivering the analysis information when the game pauses, delivering the analysis
6 information at points of significant changes in statistics during a game progression, and
7 delivering the analysis information after the game completion.

1 13. The method of claim 1, wherein providing the analysis information of the sports
2 activity to the requester includes:

3 calculating temporal statistics of game periods;

4 establishing significance level thresholds for comparisons of game statistics
5 between the game periods;

6 detecting when the significance level thresholds are exceeded; and

7 logging the exceeded significance level thresholds for delivery to the user.

1 14. The method of claim 1, wherein the analysis information of the sports activity is
2 provided to a plurality of requestors.

1 15. The method of claim 1, wherein providing the analysis information of the sports
2 activity to the requester includes providing an advertisement along with the analysis information
3 of the sports activity.

1 16. The method of claim 1, wherein a plurality of communication devices of a
2 plurality of users provide the input.

1 17. The method of claim 16, further including:
2 comparing the inputs from the plurality of users; and
3 rewarding the users based on the inputs received.

1 18. The method of claim 16, further including:
2 time-stamping each of the inputs received from each of the plurality of
3 communication devices; and
4 reconstructing a game progression based on a conglomeration of the inputs from
5 the plurality of communication devices.

1 19. A method of performing and delivering analysis of an activity, comprising:

2 receiving input from a communication device of a user;
3 processing the input provided by the user;
4 generating analysis information of the activity based on the input provided by the
5 user; and
6 providing the analysis information of the activity to a requester.

1 20. The method of claim 19, further including:
2 generating a transactional record of the activity based on the input provided by the
3 user; and
4 analyzing the transactional record of the activity to generate the analysis
5 information of the activity.

1 21. The method of claim 19, wherein the activity is a sports activity.

1 22. The method of claim 19, further including storing the analysis information of the
2 activity in an analysis information database.

1 23. The method of claim 19, wherein the requester is the user.

1 24. The method of claim 19, wherein the analysis information is provided to the user
2 via voice, graphics, animation, or textual form.

1 25. The method of claim 19, wherein processing the input provided by the user
2 includes at least one of interpreting voice input, and interpreting communication device input
3 entries.

1 26. The method of claim 25, wherein interpreting the voice input utilizes at least one
2 of: a speaker-independent speech recognition engine, a speaker-dependent speech recognition
3 engine, and a speaker pre-recorded custom utterances recognition engine.

1 27. The method of claim 20, wherein generating the transactional record of the
2 activity includes parsing the input provided by the user and performing error correction on the
3 input provided by the user based on at least one of a predefined vocabulary and grammar for user
4 communication, and a free-form natural language interpretation grammar.

1 28. The method of claim 27, wherein the free-form natural language interpretation
2 grammar is statistical language model (SLM) grammar.

1 29. The method of claim 19, further including at least one of: performing statistical
2 analysis of the activity, performing pattern detection on a transactional record of the activity,
3 creating strategy recommendations for participants in the activity, creating improvement
4 recommendations for the participants in the activity, and providing comparisons of statistical
5 analysis of a participant's activity with a group of participants' averages or team averages for the
6 activity.

1 30. The method of claim 20, wherein analyzing the transactional record of the activity
2 to generate the analysis information of the activity includes at least one of: scoring
3 characterization, participant performance characterization, group of participants performance
4 characterization, temporal-based performance characterization, location-based performance
5 characterization, and objects of the activity-based performance characterization.

1 31. The method of claim 29, wherein performing pattern detection on the
2 transactional record of the activity includes:
3 describing a pattern by defining a triggering event in terms of at least one of
4 activity transaction records and activity analysis records; and
5 defining a statistical significance level for triggering the pattern.

1 32. The method of claim 19, wherein providing the analysis information of the
2 activity to the requester includes at least one of: instantaneously delivering the analysis
3 information at a time of request, delivering the analysis information at predetermined intervals of
4 time from the time of request, delivering the analysis information at a predetermined point in an
5 activity, delivering the analysis information when the activity pauses, delivering the analysis
6 information at points of significant changes in statistics during an activity progression, and
7 delivering the analysis information after the activity completion.

1 33. The method of claim 19, wherein providing the analysis information of the
2 activity to the requester includes:
3 calculating temporal statistics of activity periods;

4 establishing significance level thresholds for comparisons of activity statistics
5 between the activity periods;
6 detecting when the significance level thresholds are exceeded; and
7 logging the exceeded significance level thresholds for delivery to the user.

1 34. The method of claim 19, wherein the analysis information of the activity is
2 provided to a plurality of requestors.

1 35. The method of claim 19, wherein providing the analysis information of the
2 activity to the requester includes providing an advertisement along with the analysis information
3 of the activity.

1 36. The method of claim 19, wherein a plurality of communication devices of a
2 plurality of users provide the input.

1 37. The method of claim 36, further including:
2 comparing the inputs from the plurality of users; and
3 rewarding the users based on the inputs received.

1 38. The method of claim 36, further including:
2 time-stamping each of the inputs received from each of the plurality of
3 communication devices; and

4 reconstructing an activity progression based on a conglomeration of the inputs
5 from the plurality of communication devices.

1 39. A program code storage device, comprising:
2 a machine-readable medium; and
3 machine-readable program code stored on the machine-readable medium, the
4 machine-readable program code having instructions to
5 receive input relating to an activity from a communication device of a
6 user;
7 process the input provided by the user;
8 generate analysis information of the activity based on the input provided
9 by the user; and
10 provide the analysis information of the activity to a requester.

1 40. The program code storage device of claim 39, wherein the machine-readable
2 program code further includes instructions to:
3 generate a transactional record of the activity based on the input provided by the
4 user; and
5 analyze the transactional record of the activity to generate the analysis
6 information of the activity.

1 41. The program code storage device of claim 39, wherein the activity is a sports
2 activity.

1 42. The program code storage device of claim 39, wherein the requester is the user.

1 43. The program code storage device of claim 39, wherein the analysis information is
2 provided to the user via voice, graphics, animation, or textual form.

1 44. The program code storage device of claim 39, wherein the instructions to process
2 the input provided by the user include at least one of instructions to interpret voice input, and
3 instructions to interpret communication device input entries.

1 45. The program code storage device of claim 44, wherein the instructions to interpret
2 voice input utilizes at least one of: a speaker-independent speech recognition engine, a speaker-
3 dependent speech recognition engine, and a speaker pre-recorded custom utterances recognition
4 engine.

1 46. The program code storage device of claim 40, wherein the instructions to generate
2 the transactional record of the activity include instructions to parse the input provided by the user
3 and instructions to perform error correction on the input provided by the user based on at least
4 one of a predefined vocabulary and grammar for user communication, and a free-form natural
5 language interpretation grammar.

1 47. The program code storage device of claim 46, wherein the free-form natural
2 language interpretation grammar is statistical language model (SLM) grammar.

1 48. The program code storage device of claim 39, wherein the machine-readable
2 program code further includes at least one of instructions to: perform statistical analysis of the
3 activity, perform pattern detection on a transactional record of the activity, create strategy
4 recommendations for participants in the activity, create improvement recommendations for the
5 participants in the activity, and provide comparisons of statistical analysis of the activity with a
6 group of participants' averages or team averages for the activity.

1 49. The program code storage device of claim 40, wherein the instructions to analyze
2 the transactional record of the activity to generate the analysis information of the activity include
3 at least one of instructions to perform: scoring characterization, participant performance
4 characterization, team performance characterization, temporal-based performance
5 characterization, location-based performance characterization, and objects of the activity-based
6 performance characterization.

1 50. The program code storage device of claim 48, wherein the instructions to perform
2 pattern detection on the transactional record of the activity include instructions to:
3 describe a pattern by defining a triggering event in terms of at least one of activity
4 transaction records and activity analysis records; and
5 define a statistical significance level for triggering the pattern.

1 51. The program code storage device of claim 39, wherein the instructions to provide
2 the analysis information of the activity to the requester include at least one of instructions to:
3 instantaneously deliver the analysis information at a time of request, deliver the analysis

4 information at predetermined intervals of time from the time of request, deliver the analysis
5 information at a predetermined point in an activity, deliver the analysis information when the
6 activity pauses, deliver the analysis information at points of significant changes in statistics
7 during an activity progression, and deliver the analysis information after the activity completion.

1 52. The program code storage device of claim 39, wherein the instructions to provide
2 the analysis information of the activity to the requester include instructions to:

3 calculate temporal statistics of activity periods;

4 establish significance level thresholds for comparisons of activity statistics

5 between the activity periods;

6 detect when the significance level thresholds are exceeded; and

7 log the exceeded significance level thresholds for delivery to the user.

1 53. The program code storage device of claim 39, wherein the analysis information of
2 the activity is provided to a plurality of requestors.

1 54. The program code storage device of claim 39, wherein the instructions to provide
2 the analysis information of the activity to the requester include instructions to provide an
3 advertisement along with the analysis information of the activity.

1 55. The program code storage device of claim 39, wherein a plurality of
2 communication devices of a plurality of users provide the input.

1 56. The program code storage device of claim 55, further including instructions to:
2 compare the inputs from the plurality of users; and
3 reward the users based on the inputs received.

1 57. The program code storage device of claim 55, further including instructions to:
2 time-stamp each of the inputs received from each of the plurality of
3 communication devices; and
4 reconstruct an activity progression based on a conglomeration of the inputs from
5 the plurality of communication devices.

1 58. A system for performing and delivering analysis of an activity; comprising:
2 a receiver to receive input from a communication device of a user;
3 a processing unit to process the input provided by the user and to generate
4 analysis information of the activity based on the input provided by the user; and
5 a transmitter to provide the analysis information of the activity to a requester.

1 59. The system of claim 58, wherein the processing unit is further adapted to generate
2 a transactional record of the activity based on the input provided by the user, and to analyze the
3 transactional record of the activity to generate the analysis information of the activity.

1 60. The system of claim 58, wherein the activity is a sports activity.

1 61. The system of claim 58, further including an analysis information database to
2 store the analysis information of the activity.

1 62. The system of claim 58, wherein the requester is the user.

1 63. The system of claim 58, wherein the analysis information is provided to the user
2 via voice, graphics, animation, or textual form.

1 64. The system of claim 58, wherein the processing unit is further adapted to at least
2 one of interpret voice input and interpret communication device input entries to process the input
3 provided by the user.

1 65. The system of claim 64, wherein at least one of: a speaker-independent speech
2 recognition engine, a speaker-dependent speech recognition engine, and a speaker pre-recorded
3 custom utterances recognition engine is utilized by the processing unit to interpret voice input.

1 66. The system of claim 59, wherein the processing unit is further adapted to parse
2 the input provided by the user and perform error correction on the input provided by the user
3 based on at least one of a predefined vocabulary and grammar for user communication, and a
4 free-form natural language interpretation grammar to generate the transactional record of the
5 activity.

1 67. The system of claim 66, wherein the free-form natural language interpretation
2 grammar is statistical language model (SLM) grammar.

1 68. The system of claim 58, wherein the processing unit is further adapted to at least
2 one of: perform statistical analysis of the activity, perform pattern detection on a transactional
3 record of the activity, create strategy recommendations for participants in the activity, create
4 improvement recommendations for the participants in the activity, and provide comparisons of
5 statistical analysis of the activity with a group of participants' averages or team averages for the
6 activity.

1 69. The system of claim 59, wherein the processing unit to analyze the transactional
2 record of the activity to generate the analysis information of the activity is further adapted to at
3 least one of performing: scoring characterization, participant performance characterization, team
4 performance characterization, temporal-based performance characterization, location-based
5 performance characterization, and objects of the activity-based performance characterization.

1 70. The system of claim 68, wherein the processing unit is further adapted to:
2 describe a pattern by defining a triggering event in terms of at least one of activity
3 transaction records and activity analysis records; and
4 define a statistical significance level for triggering the pattern.

1 71. The system of claim 58, wherein the processing unit is further adapted to at least
2 one of: instantaneously deliver the analysis information at a time of request, deliver the analysis

3 information at predetermined intervals of time from the time of request, deliver the analysis
4 information at a predetermined point in an activity, deliver the analysis information when the
5 activity pauses, deliver the analysis information at points of significant changes in statistics
6 during an activity progression, and deliver the analysis information after the activity completion.

1 72. The system of claim 58, wherein the processing unit is further adapted to:
2 calculate temporal statistics of activity periods;
3 establish significance level thresholds for comparisons of activity statistics
4 between the activity periods;
5 detect when the significance level thresholds are exceeded; and
6 log the exceeded significance level thresholds for delivery to the user.

1 73. The system of claim 58, wherein the analysis information of the activity is
2 provided to a plurality of requestors.

1 74. The system of claim 58, wherein the processing unit is further adapted to provide
2 an advertisement along with the analysis information of the activity.

1 75. The system of claim 58, wherein a plurality of communication devices of a
2 plurality of users provide the input.

1 76. The system of claim 75, wherein the processing unit is further adapted to:
2 compare the inputs from the plurality of users; and

3 reward the users based on the inputs received.

1 77. The system of claim 75, wherein the processing unit is further adapted to:
2 time-stamp each of the inputs received from each of the plurality of
3 communication devices; and
4 reconstruct an activity progression based on a conglomeration of the inputs from
5 the plurality of communication devices.

1 78. A system for performing and delivering analysis of an activity, comprising:
2 means for receiving input from a communication device of a user;
3 means for processing the input provided by the user;
4 means for generating analysis information of the activity based on the input
5 provided by the user; and
6 means for providing the analysis information of the activity to a requester.

1 79. The system of claim 78, further including:
2 means for generating a transactional record of the activity based on the input
3 provided by the user; and
4 means for analyzing the transactional record of the activity to generate the
5 analysis information of the activity.

1 80. The system of claim 78, wherein the activity is a sports activity.

1 81. The system of claim 78, further including means for storing the analysis
2 information of the activity.

1 82. The system of claim 78, wherein the requester is the user.

1 83. The system of claim 78, wherein the analysis information is provided to the user
2 via voice, graphics, animation, or textual form.

1 84. The system of claim 78, wherein the means for processing the input provided by
2 the user includes at least one of means for interpreting voice input, and means for interpreting
3 communication device input entries.

1 85. The system of claim 84, wherein the means for interpreting voice input utilizes at
2 least one of: a speaker-independent speech recognition engine, a speaker-dependent speech
3 recognition engine, and a speaker pre-recorded custom utterances recognition engine.

1 86. The system of claim 79, wherein the means for generating the transactional record
2 of the activity includes means for parsing the input provided by the user and performing error
3 correction on the input provided by the user based on at least one of a predefined vocabulary and
4 grammar for user communication, and a free-form natural language interpretation grammar.

1 87. The system of claim 86, wherein the free-form natural language interpretation
2 grammar is statistical language model (SLM) grammar.

1 88. The system of claim 78, further including at least one of: means for performing
2 statistical analysis of the activity, means for performing pattern detection on a transactional
3 record of the activity, means for creating strategy recommendations for participants in the
4 activity, means for creating improvement recommendations for the participants in the activity,
5 and means for providing comparisons of statistical analysis of the activity with a group of
6 participants' averages or team averages for the activity.

1 89. The system of claim 79, wherein the means for analyzing the transactional record
2 of the activity to generate the analysis information of the activity further includes at least one of:
3 means for scoring characterizing, means for participant performance characterizing, means for
4 team performance characterizing, means for temporal-based performance characterizing, means
5 for location-based performance characterizing, and means for objects of the activity-based
6 performance characterizing.

1 90. The system of claim 88, wherein the means for performing pattern detection on
2 the transactional record of the activity includes:
3 means for describing a pattern by defining a triggering event in terms of at least
4 one of activity transaction records and activity analysis records; and
5 means for defining a statistical significance level for triggering the pattern.

1 91. The system of claim 78, wherein the means for providing the analysis information
2 of the activity to the requester includes at least one of: means for instantaneously delivering the
3 analysis information at a time of request, means for delivering the analysis information at

predetermined intervals of time from the time of request, means for delivering the analysis information at a predetermined point in an activity, means for delivering the analysis information when the activity pauses, means for delivering the analysis information at points of significant changes in statistics during an activity progression, and means for delivering the analysis information after the activity completion.

92. The system of claim 78, wherein the means for providing the analysis information of the activity to the requester includes:

- means for calculating temporal statistics of activity periods;
- means for establishing significance level thresholds for comparisons of activity statistics between the activity periods;
- means for detecting when the significance level thresholds are exceeded; and
- means for logging the exceeded significance level thresholds for delivery to the user.

93. The system of claim 78, wherein the analysis information of the activity is provided to a plurality of requestors.

94. The system of claim 78, wherein the means for providing the analysis information of the activity to the requester includes means for providing an advertisement along with the analysis information of the activity.

1 95. The system of claim 78, wherein a plurality of communication devices of a
2 plurality of users provide the input.

1 96. The system of claim 95, further including:
2 means for comparing the inputs from the plurality of users; and
3 means for rewarding the users based on the inputs received.

1 97. The system of claim 95, further including:
2 means for time-stamping each of the inputs received from each of the plurality of
3 communication devices; and
4 means for reconstructing an activity progression based on a conglomeration of the
5 inputs from the plurality of communication devices.